DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.15

SOURCE INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** SIR-001260

Address: 333 Burma Road **Date Inspected:** 22-Jun-2009

City: Oakland, CA 94607

OSM Arrival Time: 1200 **Project Name:** SAS Superstructure **OSM Departure Time:** 2359 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shangha

Quality Control Contact: William (Bill) Oak **Quality Control Present:** Yes No

Material transfer: Yes No N/A **Sampled Items:** Yes No N/A **Stock Transfer:** N/A OK to Cut: N/A Yes No Yes No **Rebar Test Witness:** N/A **Delayed/Cancelled:** N/A Yes No Yes No

Other: Coatings Inspection

Bridge No: 34-0006 South Tower Lift #1, South Tower Lift #2, Su **Component:**

Bid Item: Lot No: 77, 78, 79 B265

Summary of Items Observed:

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following: Office

Review project documentation and organize files and binders and consolidate and label.

Suspender Brackets

Coated surfaces requiring repairs were abrasive blasted to base metal to an SSPC SP-10 condition and edges feathered. Interzinc 22 was re-applied to amend repairs. Repairs consisted of mud crack and low dry film thickness. Profile amplitude was 72-76um, approximately 1/3 square meter of surface area was re-coated and repaired to bracket numbers: SB14E, SB16E, SB18E.

South tower Lift #1

Interior Interzinc 22 coated surfaces from 28M-38M passed MEK test, pencil test, and Quarter rub test dollies were affixed for adhesion verification. Visual inspection performed and in process touch up and repairs with Interzinc 52 ongoing.

Miscellaneous Metal

Base metal surfaces of approximately 172 pieces of splice plates and channel iron were de-greased in accordance with SSPC SP-1 in preparation of abrasive blasting operations.

South Tower Lift#1

External surfaces were visually inspected for defects and damages to applied Interzinc 22 as well as Interfine 979. Fabrication incomplete and additional damages anticipated. Interiors from 28M-38M were also inspected and

SOURCE INSPECTION REPORT

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repair work rejected by ABF QA personnel. Repairs still ongoing and in process, two (2) inspections requested by ZPMC for the same work areas.

Suspender Brackets

Bracket numbers: SB20E & SB22E exhibited mud crack by ZPMC QC personnel were abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied. These units were also previously "mist" coated prior to repairs.

South Tower Lift #2

Base metal surfaces on the interior undergoing in process de-greasing operations in accordance with SSPC SP-1. ABF QA and Caltrans QA Lumley witnessed ZPMC personnel remove a worker from the interior that had apparently succumbed to solvent vapors within the tower lift during the de-greasing operations. Inspection was cancelled. No hole attendant onsite, no atmospheric monitoring occurring to verify human habitability or vapor concentration within tower structure.

Note: All inspections performed jointly with ZPMC & ABF QA/QC and Caltrans QA Lumley when achievable. International Protective Coatings technical service representatives Alpha Chen and Peng ZiLi were available for inspection and consultation.

Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

| Inspected By: | Lumley, James | Quality Assurance Inspector |
|---------------|-----------------|-----------------------------|
| Reviewed By: | Carreon, Albert | QA Reviewer |